

CLAIMS

Having thus described the invention, what I desire to claim and secure by letters patent is:

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A heat protective cover for hot water pipes adapted to extend about a hot water pipe arrangement and cover substantial portions of that hot water pipe arrangement, said heat protective cover comprising:

- a) a jacket having heat insulating qualities with a configuration similar to that of the pipe arrangement about which the jacket is to extend;
- b) an elongate split formed in said jacket allowing said jacket to be opened at said split and extend about a hot water pipe;
- c) apertures formed in portions of the jacket adjacent both sides of said slit for releasably receiving a fastener in each set of apertures to thereby lockably hold the jacket onto the hot water pipe arrangement;
- d) pair of fastener receiving lock housings located at said elongate split with one of the lock housings of each pair on one side of said slit and the other of each pair on the opposite side of the slit, said lock housings on each side of said slit

communicating with separate apertures, such that each aperture on one side of said slit is in direct alignment with an associated aperture on the opposite side of said slit and receiving a locking fastener in a releasable locking relationship when inserted into the associated apertures; and

- e) a locking element in each said lock housing and being constructed to receive a specified type of locking fastener and to hold the fastener releasably locked in said lock housing.

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The heat protective cover for hot water pipes of Claim 1 further characterized in that said locking fasteners are also reusable so that after the jacket or a portion of the jacket has been removed from the pipe arrangement, said locking fasteners can be completely reinserted in said apertures and into said lock housings and hold the jacket onto the hot water pipe arrangement.

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The heat protective cover for hot water pipes of Claim 1 further characterized in that said fasteners are screws and that said locking elements of each pair is adapted to receive the shank of one of said screws.

The heat protective cover for hot water pipes of Claim 3 further characterized in that said pair of apertures are located on a curved portion of said jacket and said apertures have
5 elliptically shaped openings.

The heat protective cover for hot water pipes of Claim 2 further characterized in that the shank of locking fastener in a pair of apertures and associated locking elements can be removed
10 from one of the apertures and locking elements of the pair and retentively held in the other aperture and locking element of the pair thereby precluding loss of the locking element.

The heat protective cover for hot water pipes of Claim 5 further characterized in that said locking fastener is a screw
15 having a threaded shank.

The heat protective cover for hot water pipes of Claim 5 further characterized in that said locking fastener is a pin having enlarged ends which are tapered outwardly providing individually
20 facing opposed locking shoulders.

The heat protective cover for hot water pipes of Claim 5 further characterized in that said apertures and locking elements are each adapted to receive at least two different types of locking fasteners.

A heat protective cover for hot water pipes adapted to extend about a hot water pipe arrangement and cover substantial portions of that hot water pipe arrangement, said heat protective cover comprising:

- a) a jacket having heat insulating qualities with a configuration similar to that of the pipe arrangement about which the jacket is to extend;
- b) an elongate split formed in said jacket allowing said jacket to be opened at said split and extend about a hot water pipe;
- c) apertures formed in portions of the jacket adjacent both sides of said slit for releasably receiving a fastener in each set of apertures to thereby lockably hold the jacket onto the hot water pipe arrangement; and
- d) pair of fastener receiving lock housings located at said elongate split with one of the lock housings of each pair on one side of said slit and the other of each pair on the opposite side of the slit, said lock housings on each side of said slit communicating with separate apertures, such that each aperture on one side of said slit is in direct alignment with an associated aperture on the opposite side of said slit and receiving a locking fastener in a releasable locking relationship when

inserted into that aperture, said apertures and associated lock housing being arranged to receive at least two different types of locking fasteners which have different locking actions.

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The heat protective cover for hot water pipes of Claim 9 further characterized in that said locking fastener is a pin having enlarged ends which are tapered outwardly providing individually facing opposed locking shoulders.

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The heat protective cover for hot water pipes of Claim 9 further characterized in that said locking fastener is a pin having enlarged ends which are tapered outwardly providing individually facing opposed locking shoulders.

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The heat protective cover for hot water pipes of Claim 9 further characterized in that said pair of apertures are located on a curved portion of said jacket and said apertures have elliptically shaped openings.

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A heat protective cover for hot water pipes adapted to extend about a hot water pipe arrangement and cover substantial portions of that hot water pipe arrangement, said heat protective cover comprising:

- a) a jacket having heat insulating qualities with a configuration similar to that of the pipe arrangement about which the jacket is to extend;
- b) an elongate split formed in said jacket allowing said jacket to be opened at said split and extend about a hot water pipe;
- c) apertures formed in portions of the jacket adjacent both sides of said slit forming sets thereof for releasably receiving a fastener in each set of apertures to thereby lockably hold the jacket onto the hot water pipe arrangement;
- d) elongate fasteners sized for insertion into each of said apertures of a pair to lockably hold the portions of the jacket on both sides of said slit together, said fasteners comprising a shank and an enlarged end section at the end thereof; and
- e) the material surrounding said apertures being sufficiently yieldable so that the enlarged end section fits within the aperture and essentially filling said aperture thereby reducing the

possibility of engagement by a tool and
unauthorized removal thereof.

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5 The heat protective cover for hot water pipes of Claim 13
further characterized in that said enlarged end section is a head
of a screw and the shank is a threaded shank of that screw and the
head fits within that aperture tightly to fill up the aperture.

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The heat protective cover for hot water pipes of Claim 14
further characterized in that said head is an Allens head requiring
an Allens head tool to enable removal thereof.

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The heat protective cove for hot water pipes of Claim 13
further characterized in that said fastener is a pin having a pair
of opposite enlarged end sections.

A heat protective cover for hot water pipes adapted to extend about a hot water pipe arrangement and cover substantial portions of that hot water pipe arrangement, said heat protective cover comprising:

- a) a jacket having heat insulating qualities with a configuration similar to that of the pipe arrangement about which the jacket is to extend;
- b) pair of fastener receiving lock housings located at said elongate split with one of the lock housings of each pair on one side of said slit and the other of each pair on the opposite side of the slit, said lock housings on each side of said slit communicating with separate apertures, such that each aperture on one side of said slit is direct alignment with an associated aperture on the opposite side of said slit and receiving a locking fastener in a releasable locking relationship when inserted into that aperture;
- c) a locking element in each said lock housing and being constructed to receive a specified type of locking fastener and to positively hold and lock the fastener in a releasably locked position in said locking housing; and

d) a fastener inserted into one of said pairs of apertures and having an elongate shank engaged in and releasably held in said locking element.

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The heat protective cover of Claim 17 further characterized in that said locking element comprises an elongate channel therein and a pair of recesses in said channel adapted to receive a portion of said shank and hold same.

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The heat protective cover of Claim 18 further characterized in that said fastener is a pin having a pair of enlarged ends providing inwardly facing opposed shoulders which engage said recesses.

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The heat protective cover of Claim 18 further characterized in that said fastener is a screw and the portion of the shank engaged and held is threads on the shank of the fastener.

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The heat protective cover of Claim 18 further characterized in that said apertures and locking elements are each adapted to receive at least two different types of locking fasteners.

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A heat protective cover system for hot water pipes comprised of a plurality of jackets which are capable of being coupled together to cover hot water pipes of a particular configuration, said heat protective cover system comprising:

- a) a first jacket capable of being wrapped about a portion of a pipe configuration, said first jacket having an end section which provides a socket;
- b) a second jacket also capable of being wrapped about another adjacent portion of the pipe configuration, the second jacket having an end portion which is sized to snugly fit within the socket of said first jacket;
- c) an abutment flange formed on the inner end of said first jacket and being located to receive and engage an end of the second jacket; and
- d) fastener receiving apertures on said first jacket for receiving fasteners and which will thereby further lock said second jacket to said first jacket.

The heat protective cover system for hot water pipes of Claim 22 further characterized in that said abutment flange is located close to an open end of said first jacket and forms a receiving

space from said open end to said abutment flange for receiving an end of the second jacket.

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5 The heat protective cover system for hot water pipes of Claim
22 further characterized in that both of said jackets have longitudinal slits to be wrapped about pipe sections they are designed to cover.

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The heat protective cover system for hot water pipes of Claim 24 further characterized in that each of said jackets have pairs of aligned apertures on opposite sides of said slit to receive fasteners and thereby lock the jackets on the pipe sections they are designed to cover.

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The heat protective cover system for hot water pipes of Claim 22 further characterized in that said socket first jacket has adjacent the end thereof one of an inner protuberance or a recess and the second jacket has the other of the protuberance or the recess, such that the protuberances fits within the recesses.

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The heat protective cover system for hot water pipes of Claim 22 further characterized in that said protuberances and recess are both circular in shape.

A heat protective cover system for hot water pipes comprised of a plurality of jackets which are capable of being coupled together to cover hot water pipes of a particular configuration, said heat protective cover system comprising:

- a) a first jacket capable of being wrapped about a portion of a pipe configuration, said first jacket having an end section which provides a socket;
- b) a second jacket also capable of being wrapped about another adjacent portion of the pipe configuration, the second jacket having an end portion which is sized to snugly fit within the socket of said first jacket; and
- c) said first jacket having a portion which is tapered toward said socket and said second jacket has a portion thereof tapered toward the end which fits within the socket, the taper of one of said jackets being an outward or diverging taper, such that the end is enlarged and the taper of the other of the jackets being an inward or converging taper, such that when the end of the second jacket is fitted within the socket, the overall appearance of the jackets is that they have an essentially uniform diameter throughout and one is an extension of the other.

The heat protective cover system for hot water pipes of Claim 28 further characterized in that the end of the first jacket is tapered outwardly and the end of the second jacket to be received at the socket is tapered inwardly.

The heat protective cover system for hot water pipes of Claim 29 further characterized in that the degree of taper on the first jacket is approximately the same as the degree of taper on the second jacket.

A protective jacket for disposition around a pipe carrying hot water to prevent contact with and potential for burn injury, said jacket comprising:

- a) a jacket having an outer wall formed of a flexible and bendable material capable of being wrapped about a portion of the pipe, said wall having a length extending about a portion of the length of the pipe;
- b) a slit in said jacket allowing said wall to be opened and fit about a pipe with the resiliency of the material allowing the portion of the jacket at said slit to come back together; and
- c) fins located at an inner surface of said pipe and projecting inwardly to engage a pipe or component secured to the pipe and which fins are longitudinally arranged in said wall of the jacket.

The protective jacket for disposition around a pipe carrying hot water of Claim 31 further characterized in that said fins are also formed of a flexible and bendable material so that they will deflect to accommodate a pipe or component on the pipe.

The protective jacket for disposition around a pipe carrying hot water of Claim 32 further characterized in that said fins are formed of a material which also has sufficient rigidity to hold the weight of the jacket on a vertical section of pipe through frictional engagement with the pipe and/or a component on the pipe.

The protective jacket for disposition around a pipe carrying hot water of Claim 32 further characterized in that apertures formed in portions of the jacket adjacent both sides of said slit for releasably receiving a fastener in each set of apertures to thereby lockably hold the jacket onto the hot water pipe arrangement.

The protective jacket for disposition around a pipe carrying hot water of Claim 34 further characterized in that pairs of fastener receiving lock housings are located at said elongate split with one of the lock housings of each pair on one side of said slit and the other of each pair on the opposite side of the slit, said lock housings on each side of said slit communicating with separate apertures, such that each aperture on one side of said slit is in direct alignment with an associated aperture on the opposite side of said slit and receiving a locking fastener in a releasable locking relationship when inserted into the associated apertures

A fastener for use heat protective covers of the type disposed over hot water pipes and which have an elongate slit allowing jacket sections to be spread apart and enveloply cover a pipe section, said fastener comprising:

- a) an elongate shank;
- b) a pair of enlarged ends at each of the opposite ends of said shank; and
- c) a shoulder abutment surface facing inwardly on each of the enlarge ends and being sized and located to engage shoulders in apertures of each of the jacket sections.

The fastener of Claim 36 further characterized in that said enlarged ends have outwardly tapering surfaces.

The fastener of Claim 37 further characterized in that said outwardly tapering surfaces terminate in rounded ends and which ends are sized sufficient to fill an aperture in which they are inserted.